

WHAT IS CLAIMED IS:

1. A gas detection device comprising:
 - a light source for emitting light beams;
 - a light sensor element for sensing the light beams emitted from the light source;
 - a shield plate for reducing light beams that directly reach the light sensor element;
 - a package for housing the light source and the light sensor element; and
 - a reflector plate arranged for reflecting light beams emitted from the light source to the light sensor element, wherein
 - the package houses all of the light source, the light sensor element, and the shield plate, and
 - the light sensor element detects a degree of light absorption by gas provided in a space between the reflector plate, the light source and the light sensor element.
2. The gas detection device according to claim 1, wherein:
 - the light source is an infrared emitting device; and
 - the light sensor element is an infrared sensor element.
3. The gas detection device according to claim 1, wherein the package has a light source window for passing light beams emitted from the light source to the reflector plate and a light sensor window for passing light reflected off the reflector plate to the light sensor element.

4. The gas detection device according to claim 3, wherein at least one of the light source and the light sensor windows has a band-pass filter for passing only light beams of a predetermined wavelength.

5. The gas detection device according to claim 1, wherein the light source and the light sensor element are mounted on a single circuit chip.

6. The gas detection device according to claim 1, wherein the light source and the light sensor element are mounted on separate circuit chips.